

# Audit Report 330-4002 Management of the EDMS Initiative – Contract P0162

June 29, 2005

#### **EXECUTIVE SUMMARY**

The purpose of this audit was to determine what caused the problems associated with the Electronic Document Management System (EDMS) Initiative and to develop recommendations that the Office of Information Systems could use to improve their processes. This report communicates the final audit results of the Management of the EDMS Initiative - Contract P0162. Each audit objective focused on a different, key phase of the EDMS initiative. A previous interim report dated March 31, 2005, addressed the findings associated with Objectives 1 and 2 which have been included as Appendix A of this report. This report addresses Objectives 3 and 4. The four audit objectives were:

- Objective 1 Did the project goals, procedures, specifications, and management direction effectively ensure the realization of EDMS goals as stated in Policy Statement 000-325-008?
- Objective 2 Did the vendor selection process for the EDMS vendor integrator fully comply with established procedures and efficiently and effectively ensure an appropriate vendor selection?
- **Objective 3** Did the contract negotiation process fully comply with established procedures and efficiently and effectively ensure that contract terms and fees were fairly negotiated?
- Objective 4 Did contract and project management fully comply with established procedures and result in efficiently and effectively implemented EDMS applications?

The contract negotiation process did not fully comply with established procedures and failed to effectively ensure that contract terms and fees were fairly negotiated. Additionally, the contract and project management of Contract P0162 did not fully comply with established procedures and failed to result in efficiently and effectively implemented EDMS applications.

To address contract negotiation issues in place for term contracts procured in the Office of Information Systems (OIS) we recommend the Assistant Secretary for Finance and Administration require that:

Personnel responsible for contracting on behalf of the Department, including Project Managers, are adequately trained to perform all functions associated with procurement and acquisition. Training should include participation in the Department of Management Services' Contractor Negotiation Certification Training.

- Personnel granted signatory authority are trained in both ethics and the responsibilities associated with the authority granted them. These individuals should sign annual conflicts of interest statements identifying all potential conflicts, both actual and perceived. Review of these statements should be made part of each acquisition or procurement, and should be included in the contract files.
- Contracts are clearly written, technically sufficient, and supportive of project performance monitoring.
- Contract negotiations adhere to the Procurement Office's Negotiations Handbook published January 28, 2005.
- The Procurement Office review contract negotiation procedures used to procure other professional services to develop contract negotiation procedures for IT related services. Contract negotiations for IT related services should include:
  - o Thoroughly documented development of labor rates, hours to be expended, direct expense details, overhead and profit margin development, and other aspects of cost and price analysis;
  - o Documentation of planning;
  - o Bargaining characterized by the skillful use of a variety of negotiation tactics;
  - o Thorough market research;
  - Analysis of price proposals based on the current market situation and specific contract requirements;
  - Use of a knowledgeable negotiating team and the involvement of management;
  - o Certification of contractor's proposed costs; and
  - o Documentation of all analyses and decisions based on those analyses.

To strengthen OIS contract and project management processes, we recommend that the Assistant Secretary for Finance and Administration require:

- The Business System Support Office Manager to develop, implement, enforce, and monitor project management procedures that includes current project management practices and emphasizes the importance of ethics and fiscal responsibility. These procedures should require Project Managers to:
  - o Assess the reasonableness of invoices in relation to actual project progress;
  - o Review invoices for statutory and procedural compliance; and
  - O Document that all goods and services received conform to requirements and specifications established in the contract, base line documents, and/or task assignments. This may be accomplished by adding a signed statement to the front of the Purchase Order Delivery Notice when submitting an invoice for payment.
  - The Chief Information Officer to better support OIS' project managers by assigning an OIS employee, as envisioned by the ISDM, to serve as contract manager for Type B (Contractual/Miscellaneous) and other atypical, higher-risk contracts;
  - The Chief Information Officer to incorporate standardized and comprehensive contract and project management training into OIS' current training program. This training should emphasize ethics and responsibility and include elements of the Department's Project Management Training course that apply to the management of Type B (Contractual/Miscellaneous) contracts.
  - The Chief Information Officer require Information Resource Requests and Purchase Orders to include the deliverables to be received, establish the required date of completion, hours to be expended, billing rates, and costs to be reimbursed when the primary procurement document (e.g., contract, task assignment, etc...) does not specifically these elements.

### **TABLE OF CONTENTS**

<b>BACKGRO</b>	UND AND INTRODUCTION	3
<b>OBJECTIVI</b>	ES, SCOPE, AND METHODOLOGY	6
FINDINGS A	AND RECOMMENDATIONS	
Audit Finding 3 – Contract Negotiation Process		7
Audit Finding 4 – Contract and Project Management		13
<b>APPENDIC</b>	ES	
Α.	Interim Advisory Findings and Recommendations	20
B.	Audit Team and Statement of Accordance	29
C.	Distribution List	30

#### **BACKGROUND AND INTRODUCTION**

This audit was performed by the Office of Inspector General as a result of contract and project management weaknesses identified in our Contract Audit No. 140-2014; Yang Enterprises, Inc., (YEI) Contracts BA974 and P0162, dated March 29, 2004. The Department is engaged in legal proceedings pertaining to YEI and the former EDMS Project Manager, Ms. Mavis Georgalis.

#### **Finding 3 – Contract Negotiation Process**

YEI participated in two separate negotiation phases; the first negotiation established the fees associated with the pilot project; the second negotiation established the fees associated with Contract P0162.

#### **Pilot Project -**

In March of 1998, as part of the Department's EDMS vendor selection process, Yang Enterprises, Inc. (YEI) and Blueridge Technologies, Inc. were asked to submit price proposals as a prerequisite to participating in a Live Test Demonstration. According to the Invitation To Negotiate (ITN), these price proposals were required to be scored and ranked to determine which vendor would be asked to proceed with the pilot project. ITN Document #JA0698D1, Section 7.5 – Negotiation, required each selected vendor to participate in the Live Test Demonstration submit résumés for personnel who may be used to provide professional services, the rates for those services, and a breakdown of how the rates were calculated. No résumés or a breakdown of the proposed costs were located. Although price proposals were submitted, no evidence was found indicating that the price proposals were scored and ranked. YEI's proposed rates were greater than those proposed by Blueridge Technologies, Inc.

After YEI was chosen to perform the pilot project, negotiations were conducted to develop the rates and fees to be billed to the Department for YEI's pilot project work. The rates and fees negotiated for pilot project billing were based upon the rates and fees included in YEI's initial price proposal. Former EDMS Project Manager, Mavis Georgalis, and procurement office staff participated in this process.

In early July of 1998, Mavis Georgalis informed the Chief Information Officer that the labor billing rates to be paid by the Department to YEI for professional services relating to the Construction Document Management System (CDMS) pilot project were to be based on the midrange of FDOT salary structures for required employee classifications (e.g. Data Processor I) plus 158% overhead (the maximum overhead allowed as of October 1, 1995) and 10% profit margin.

The Department did not pay these rates. In a letter from YEI, dated July 24, 1998, YEI confirmed the agreed upon rates in connection with the pilot project with former EDMS Project Manager Georgalis. Ms. Georgalis signed the agreement indicating that she agreed to the following terms and conditions relating to the pilot project:

CLASSIFICATION	RATE	
Project Manager	\$150	
Senior System Analyst	\$ 76	
Trainer	\$116	
Documentation Specialist	\$ 60	
Technical Support Specialist	\$150	

For all classifications, except the senior systems analyst, these rates were substantially higher than the rates calculated by burdening the mid-range of the Department's salary structures and were not supported by résumés or include an explanation of how the rates were developed.

#### **Contract Rates -**

In January of 1999, after YEI was awarded the EDMS contract, the Department negotiated with YEI to establish contract rates and fees. The Department established a budgetary ceiling of \$8,000,000 based on recommendations made in Universal Systems, Inc.'s (USI) Functional Specifications Document. Labor billing rates for Contract P0162 were developed based on the mid-range of Department career service employee classifications related to data processing plus 160% overhead and a 10% profit margin, with the exception of the Project Manager and Technical Support Specialist classifications, which were set at the highest Departmental rate. Documentation justifying the use of the high point for these two classifications was not located in project files. No rationale for using the overhead rate of 160% or profit margin of 10% was noted. No support was found to indicate whether YEI's overhead was similar to or greater than these rates.

Labor billing rates were significantly lower than both the rates initially proposed by YEI and the rates used to bill for pilot project effort, which indicates that the rates initially proposed by YEI and billed to FDOT during the pilot project were inflated.

For the purposes of analyzing the reasonableness of YEI's labor billing rates, we compared YEI's rates to those of ICF Kaiser and Montalbano and Associates. YEI's labor rates generally exceed ICF Kaiser's labor billing rates for work performed under Contract C5767 for similar labor classifications. For Contract C5767, labor rates were developed in a manner similar to the method used to develop Contract P0162 rates.

YEI's labor billing rates exceeded those used by Montalbano and Associates to bill for EDMS work on Consultant Commodity Contract 975-556-00-1. A former YEI employee eventually went to work for Montalbano and Associates. This former YEI employee continued to provide EDMS services similar to those he performed for YEI on Contract P0162. Under Contract P0162, YEI billed for this employee's time at a rate of \$79.03. Under Contract 975-556-00-1, Montalbano and Associates billed for the same employee at a rate of \$45.

YEI's labor billing rates for Contract P0162 were generally similar to or less than the rates billed to the Department for work they performed in connection with Contract C5756 during the 1995-1996 fiscal year. Contract C5767 rates were burdened with an overhead rate of 135% and profit

margin of 15%, while Contract P0162 rates were burdened with an overhead rate of 160% and profit margin of 10%.

### Finding 4 – Contract and Project Management

The EDMS Manual and Topic 375-055-015, Electronic Document Management would have been the sole source of procedures relating to the EDMS Project. However, these procedures were never implemented and no other source of EDMS related procedures applied to Contract P0162.

The Specialized Technology Office was created to serve the Department's EDMS and GIS needs. The Chief Information Officer did not direct the Manager of Specialized Technologies, Mavis Georgalis, to establish procedures for the Specialized Technology Office.



# **OBJECTIVES, SCOPE, AND METHODOLOGY**

The **objectives** covered in this Audit Report were:

- Objective 3 Did the contract negotiation process fully comply with established procedures and efficiently and effectively ensure that contract terms and fees were fairly negotiated?
- **Objective 4** Did contract and project management fully comply with established procedures and result in efficiently and effectively implemented EDMS applications?

The **scope** of this audit covers information related to the EDMS initiative beginning in 1992 with the Production Management Business Area's analysis of EDMS through the cancellation of Contract P0162 in 2004. Fieldwork began in August of 2004 and was completed in March of 2005. Former EDMS Project Manager Georgalis was not interviewed due to ongoing litigation. We did not assess or draw conclusions regarding the overall success of the EDMS initiative.

The **methodology** used to achieve our audit objectives included:

- Review of the EDMS contract and project documentation;
- Analysis of planned verses actual schedules and resources;
- Comparison of contract negotiations processes and contract and project management to requirements;
- Review of applicable statutes and procedures;
- Review and analysis of the following information:
  - o Purchase Orders:
  - o Invoices;
  - o Information Resource Requests;
  - o EDMS Project Schedules;
  - o Specialized Technology Status Reports;
  - o YEI Status Reports; and
  - YEI Estimates.
- Best practices research: and
- Staff interviews.

#### FINDINGS AND RECOMMENDATIONS

# **Audit Finding 3 – Contract Negotiation Process**

# **Objective**

Did the contract negotiation process fully comply with established procedures and efficiently and effectively ensure that contract terms and fees were fairly negotiated?

#### Conclusion

The contract negotiation process did not fully comply with established procedures and failed to effectively ensure that contract terms and fees were fairly negotiated.

It is important to note that OIS infrequently procures services using state term contracts like Contract P0162. The unusual nature of Contract P0162 indicates that the weaknesses associated with it are probably specific to P0162 and do not apply to the majority of contracts entered into by OIS.

In general, OIS is able to successfully negotiate the majority of its contracts without difficulties similar to those encountered with Contract P0162. P0162 presented several challenges that OIS does not encounter on a regular basis, including: new procurement methodology, new Project Manager, new technology, reduced field of responsive vendors, and an unusual negotiation methodology.

OIS is also able to successfully negotiate prices in part because OIS frequently contracts with smaller, less expensive firms. Since the vendor employee works along side of the FDOT personnel and usually the task Project Manager, staff augmentation contracts also enable an increased level of oversight.

# Supporting Evidence

While our overall conclusion is that the contract negotiation process did not effectively ensure that contract terms and fees were fairly negotiated, the process was well executed in a number of respects:

- Negotiations appear to have been timely;
- Negotiations for the pilot project involved a cross-functional team:
- The ITN identified deal breakers that vendors were required to conform to if they were to be considered for the Live Test Demonstration;
- The Live Test Demonstration provided an opportunity for OIS to verify vendor claims;
- The Department developed an overall pricing objective of \$8,000,000 based on recommendations made in Universal Systems, Inc.'s (USI) Functional Specifications Document;
- The use of an ITN gave the Department additional bargaining leverage.

However, the following conditions are the basis for our conclusion that the contract negotiation process did not fully comply with procedures and failed to effectively ensure that contract terms and fees were fairly negotiated. Our conclusion is based on our review of the contract, procedures, negotiations, and the control environment.

Review of Contract P0162 revealed weaknesses indicative of the failure of the contract negotiations process, specifically:

- Contract negotiations did not result in a clearly-written, technically sufficient contract.
  - Contract language did not facilitate performance monitoring or mitigate the risk of loss resulting from changes (i.e., Department requirements, vendor's ability to perform, or changes in technology).
  - Contract language did not specifically define thresholds for vendor performance, maintenance and support response times, non-performance penalties, or performance incentives.
- Contract P0162 did not clearly state specific deliverables.

The contract negotiations process did not fully comply with the contract or existing procedures, specifically:

- Contract negotiations were performed by former EDMS Project Manager, Mavis Georgalis, and did not include at least three individuals as required by Section 287.057, F.S., Procurement of Commodities or Contractual Services, DMS Memorandum #21, and Department Procedure 375-040-020, Procurement of Commodities and Contractual Services; and
- Mavis Georgalis did not issue task assignments detailing deliverables, scope of services, limiting amounts, or other contractual requirements as prescribed by Section 287.057, F.S., Contract P0162, or Department procedures.

The contract negotiations process failed to incorporate basic elements of negotiation, analysis, or verification, specifically:

- Contract negotiations for Contract P0162 were not well documented.
- YEI did not provide résumés to support employee qualifications and YEI's employee qualifications were not evaluated as required by the ITN Document #JA0698D1.
- Project files contained no evidence that Mavis Georgalis reviewed or analyzed indirect costs, overhead, or operating margin. Instead, overhead of 160% and profit margin of 10% were used to develop Contract P0162 labor rates.
- Contract and project documentation did not include evidence that Mavis Georgalis verified costs, evaluated costs for reasonableness and allowability, or compared proposed costs with:
  - o Actual costs previously incurred by YEI;

- o Independent cost estimates;
- o Forecasts or planned expenditures;
- Prior estimates or historical data for same of similar items; or
- o Cost trends for the same or similar items.
- The project files did not contain evidence that labor rates or estimated labor hours were reviewed for the initial price proposal, pilot project proposal, or the contract pricing proposal.
- Contract Negotiations did not incorporate the following best practices:
  - Evaluation of the methodology used by YEI to estimate costs;
  - o Review of cost elements by a multifunctional team;
  - o Development of a negotiation plan; or
  - o Involvement of senior management.
- When negotiating pricing, the former EDMS Project Manager, Mavis Georgalis, did not adequately use key bargaining strategies, specifically:
  - The Department unnecessarily sacrificed bargaining power by including budget ceiling in the ITN document; and
  - The Department did not utilize bargaining leverage afforded by the ITN process when negotiating contract pricing.

Issues with the contract negotiations process are symptomatic of weaknesses in the control environment, specifically:

- The process for granting signatory authority does not adequately emphasize ethics and the fiscal responsibilities associated with such authority;
- Conflicts of interest were not identified; and
- The Department does not adequately train personnel in the negotiation and administration of Type B Contracts (Contractual/Miscellaneous).

#### Criteria

# Section 287.057, Florida Statutes, Procurement of Commodities and Contractual Services

This statute contains procurement requirements, including the requirement that a negotiation team consist of at least three employees who have experience and knowledge in the program areas and service requirements for which contractual services are sought.

#### **Department of Management Services Memorandum #21**

This memorandum provides ITN process guidelines, including basic methodologies for competitive negotiations.

# Procurement Procedure 375-040-020, Procurement of Commodities and Contractual Services

This procedure requires the Contractual Services Unit to maintain a

Audit Report No. 330-4002 • Page 9

contract file which contains all pertinent documentation of the procurement, contracting, and the administrative phases. It also requires that the vendor selection process comply with Section 287.057, F.S., and that three or more people perform the selection. This procedure also describes the procurement process as the preliminary portion of the overall acquisition process, which includes the development of the scope of services, the preliminary development of payment methods/terms and conditions, the selection of the contractor, and the establishment of pricing information.

### **Functional Specifications Document**

Policy 000-325-008 established the Functional Specifications Document as the Department's five-year guide and EDMS implementation plan. This document analyzed the potential costs associated with developing an Enterprise-wide EDMS. This analysis formed management's basis for establishing an \$8,000,000 budgetary ceiling.

#### **Best Practice Research**

Florida Information Technology Consultant Services Audit #2000-06, Defense Procurement and Acquisition Policy – Contract Pricing Reference Guide, Volumes 3 and 5; US Securities and Exchange Commission, Audit No. 350, Administration of Information Technology Contracts; FDOT Topic No. 375-030-010-d, Amendments and Task Work Orders for Professional Services; and a variety of other literature provided common characteristics of successful contract negotiations. Based on this research, the following are characteristic of successful contract negotiations:

- Clearly stated deliverables;
- Cost analysis that includes tests for reasonableness and verification and evaluation of costs;
- Evaluation of the methodology used by the vendor to develop proposed cost elements;
- Participation of a multi-functional team;
- Development of a negotiation plan;
- Comparison of proposed costs with:
  - o Actual costs previously incurred by the vendor;
  - o Previous cost estimates proposed by the vendor;
  - o Other cost estimates received;
  - o Independent cost estimates;
  - o Forecasts or planned expenditures; and
  - o Market information;
- Use of a variety of bargaining strategies;
- Adequate training; and
- Emphasis on ethics.

The following factors contributed to the failure of the contract negotiation process:

 Failure of the former EDMS Project Manager, Mavis Georgalis, to negotiate contract terms in a manner that

Audit Report No. 330-4002 • Page 10



Cause

Impact/Risk

Recommendation

promoted the Department's interests;

- Management did not establish a control structure to ensure adequate contract and project management oversight.
- Senior management's over-reliance on Mavis Georgalis;
- Weaknesses in the control environment related to signatory authority, conflicts of interest, contract negotiation and administration, and procedures.

Failure to adequately negotiate contract terms and fees increases the risk that the Department will be subject to unfair or weak contractual terms and conditions. This condition may result in the Department paying too much for goods and services.

To address contract negotiation issues in place for term contracts procured in the OIS we recommend the Assistant Secretary for Finance and Administration require that:

- Personnel responsible for contracting on behalf of the Department, including Project Managers, are adequately trained to perform all functions associated with procurement and acquisition. Training should include participation in the Department of Management Services' Contractor Negotiation Certification Training.
- Personnel granted signatory authority are trained in both ethics and the responsibilities associated with the authority granted them. These individuals should sign annual conflicts of interest statements identifying all potential conflicts, both actual and perceived. Review of these statements should be made part of each acquisition or procurement, and should be included in the contract files.
- All contracts are clearly written, technically sufficient, and supportive of project performance monitoring.
- All contract negotiations adhere to the Procurement Office's Negotiations Handbook published January 28,
- The Procurement Office review contract negotiation procedures used to procure other professional services to develop contract negotiation procedures for IT related services. Contract negotiations for IT related services should include:
  - o Thoroughly documented development of labor rates, hours to be expended, direct expense details, overhead and profit margin development, and other aspects of cost and price analysis;
  - Documentation of planning;
  - Bargaining characterized by the skillful use of a variety of negotiation tactics;
  - Thorough market research;
  - o Analysis of price proposals based on the current market situation and specific contract requirements;

Audit Report No. 330-4002 • Page 11

- Use of a knowledgeable negotiating team and the involvement of management;
- o Certification of contractor's proposed costs; and
- Documentation of all analyses and decisions based on those analyses.

# Management Response



# **Audit Finding 4 – Contract and Project Management**

# Objective

Did contract and project management fully comply with established procedures and result in efficiently and effectively implemented EDMS applications?

#### Conclusion

The contract and project management of Contract P0162 did not fully comply with established procedures and failed to result in efficiently and effectively implemented EDMS applications.

Use of a term contract significantly impacted the contract and project management of the EDMS initiative. Term contracts require a high level of skill and vigilance on the part of the project manager and can be complicated to manage financially. The former EDMS Project Manager, Mavis Georgalis, did not exert the oversight and guidance necessary for this project to be successful. Mavis Georgalis did not develop and implement adequate procedures, enforce contract terms, monitor vendor performance, or inform management of deficiencies in vendor performance. Mavis Georgalis approved payment of vendor invoices that lacked adequate support.

As discussed in Finding #2 of the interim report, the selection of YEI, as the EDMS vendor integrator, compounded the project management issues identified in this finding.

It is important to note that the management of current OIS contracts differs significantly from the way in which Contract P0162 was managed. OIS has implemented several controls to ensure that future contracts are successful, specifically:

- Reassigned the EDMS function under the Business System Support Office (BSSO) which is subject to the Information Systems Development Methodology (ISDM).
- BSSO's current practice is to compare actual resources expended to resources budgeted and compare hours billed by consultants to actual hours worked.
- The ISDM requires the Contract Manager to ensure that invoices are compliant with contract terms and provisions.
- BSSO incorporates the following best practices into its project management methodology:
  - o Performing risk assessment during the identification and assessment phase of application development;
  - o Developing well-defined requirements;
  - o Using Microsoft Project to record task information;
  - Conducting project wrap-up/post project summaries to discuss ways that future projects could be improved; and
  - Assessing project success at several intervals throughout the project's lifecycle.
- BSSO requires several layers of system and user testing against the application requirements. User acceptance is the

Supporting Evidence

final layer of testing, and ensures that the end user is satisfied with the application.

The following conditions are the basis for our conclusion that the contract and project management of Contract P0162 did not fully comply with established procedures and failed to result in efficiently and effectively implemented EDMS applications. Our conclusion is based on our review of procedures, contract and project documentation and processes, financial documentation, and Contract P0162.

#### **PROCEDURES**

Although the EDMS Project is currently subject to the ISDM, review of procedures indicates the EDMS Project suffered from a lack of procedures. The primary sources of EDMS guidance, the EDMS Manual and Topic 325-055-015, Electronic Document Management, were never implemented.

# CONTRACT AND PROJECT MANAGEMENT DOCUMENTATION

Inadequate and incomplete contract and project documentation are symptomatic of a lack of transparency. Lack of transparency belies a lack of accountability. Review of the contract and project files revealed inadequate and/or incomplete project documentation, specifically:

- Although Joint Application Development sessions were held, documentation describing the content and results of the sessions was not available.
- Official acceptance and sign-off of functional and technical specifications was not readily apparent.
- Application development consistently exceeded estimated work effort, but no justification or explanation was in evidence.
- Project schedules were incomplete and sometimes conflicted with other documentation.
- Application testing was conducted, but the testing process and results were not sufficiently documented.
- Deployment and training constituted a significant portion of project efforts, but neither the issues that arose during deployment and training nor the steps taken to address those issues were well documented.
- Help desk calls were logged, but it was difficult to determine how and when those issues were resolved.
- Overall project progress was difficult to determine. Project documentation did not provide the percentage of completion as applications were developed or track the degree to which the project achieved its goals.
- Task assignments, as required by the contract, were not issued.

- Vendor estimates were not sufficiently detailed to allow for project tracking.
- Application acceptance was not formally documented.
   Instead, issues were logged, discussed, and resolved through informal sources.

#### CONTRACT AND PROJECT MANAGEMENT PROCESS

We reviewed project management documentation including estimates prepared by the vendor, status reports, project schedules, and other tracking documentation to determine the degree to which the former EDMS Project Manager, Mavis Georgalis, monitored project progress. Mavis Georgalis failed to adequately perform project management duties, specifically:

- The project schedule created by Mavis Georgalis was abandoned in July of 2000.
- The project schedule did not allow for comparisons of actual and expected results.
- Work performed on the project did not adhere to the project schedule.
- The Specialized Technology Status Reports submitted to the Chief Information Officer did not identify tasks that significantly exceeded estimated completion dates.
- The Specialized Technology Status Reports did not contain percentage of completion estimates for each application.
- Status report completion dates were rarely met causing planned applications to be postponed indefinitely.
- YEI Status Reports did not include revised dates of completion.
- YEI did not submit Status Reports during the pilot project or during portions of the project after the contract was awarded.
- YEI did not provide estimates of the hours, labor costs, or expenses for all tasks or applications. The few estimates that YEI submitted did not provide consistent or useful information.
- Work on the project significantly exceeded YEI estimates of hours, labor costs, and expenses.
- Mavis Georgalis did not hold the vendor to estimates and require justifications for deviating from initial estimates.
- YEI's estimates were used to develop purchase order limiting amounts. As actual work exceeded estimates, new purchase orders were issued.
- Mavis Georgalis did not effectively use purchase orders or invoices as tools to track project progress.

#### FINANCIAL DOCUMENTATION

Review of purchase orders, invoices, information resource requests, and other financial documentation revealed that Mavis Georgalis failed to adequately perform basic contract management duties, specifically:

Purchase orders did not cover the expected time to complete

Audit Report No. 330-4002 • Page 15

- a specific task; instead they covered entire fiscal years and rarely expressed concrete dates of completion for deliverables.
- Purchase orders often expressed deliverables in terms of services to be provided, but did not indicate the application upon which the work was performed.
- Some of the purchases of software did not specify the application for which the software was being purchased.
- Year-end invoices were submitted for the remaining encumbered purchase order balance without the documentation necessary to support the invoiced amount.
- Purchase orders and information resource requests did not adequately describe deliverables and used the fiscal year-end instead of establishing expected delivery dates.
- Invoices frequently did not identify the application upon which work had been performed.
- Purchases for software often did not coincide with either the start of application development or completion.
- Mavis Georgalis permitted the use of lump sum purchase orders and invoices in violation of Contract P0162.
- Lump sum invoices were not supported and sometimes charged for services performed outside the purchase order time period.
- Mavis Georgalis approved payment for six ARCIS applications totaling \$1,500,000 (\$250,000 x 6 applications).
   Project records and corroborating interviews indicate that YEI only implemented three applications.
- In April of 2001, the Department paid maintenance fees for six application licenses although only three were in production. According to the maintenance agreement, maintenance included ARCIS upgrades, however, YEI had previously invoiced and been paid for upgrading ARCIS to version 7.2. These charges should have been covered by the maintenance agreement and reduced the amount charged for maintenance.
- The Department paid YEI for services relating to upgrading ARCIS version 7.0 to version 7.2 even though the upgrades were never implemented.

#### **CONTRACT P0162**

Our review indicated that Mavis Georgalis did not enforce all contract terms, specifically:

- Mavis Georgalis did not issue task assignments describing the personnel classifications required for each task.
- YEI did not staff the Central Infrastructure Development Facility. Most work was performed at the YEI's office in Oviedo, Florida, which denied the Department the opportunity to directly supervise EDMS efforts. Approval of the use of personnel outside of Tallahassee was not in evidence.

Audit Report No. 330-4002 • Page 16

# Criteria

- Mavis Georgalis did not consistently require monthly status reports from YEI.
- Mavis Georgalis issued lump sum purchase orders and approved the payment of lump sum invoices that did not detail either the hours worked or tasks performed by YEI's employees.

Our conclusions were based on review of Contract P0162 and the Information Systems Development Methodology.

We also reviewed a variety of literature which provided common characteristics of successful project management. Based on this research, the following are characteristic of successful project management:

- Planning to control the project and ensuring successful results.
- Written project objectives that establish calendar date deadlines.
- Peer reviews of project manager work, including plans, requirements, architecture, design, code, and test cases, are as effective or even more effective than testing.
- Measurement of development process success against an industry standard such as the Capability Maturity Model (CMM) from the Software Engineering Institute at Carnegie Mellon University.
- Performance of risk management activities to reduce the likelihood of an undesirable outcome and encourage the use of processes that identify, assess, classify, plan, track and mitigate risks.
- Use of well-defined requirements to establish the project scope and track progress by evaluating interim milestones.
- Project tracking utilizing tools such as Gantt Charts.
- A project manager skilled in leadership, management, negotiations, problem-solving and communications.
- Project wrap-up/post project summaries that discuss ways to improve future projects and assess project success at several intervals throughout the project's lifecycle.
- Use of a best practices library of the methods that have worked in previous projects.

Additionally our conclusions were based on review and analysis of the following information: Purchase Orders;

- Invoices;
- Information Resource Requests;
- EDMS Project Schedules;
- Specialized Technology Status Reports;
- YEI Status Reports; and
- YEI Estimates.

#### Cause

Impact/Risk

The following factors contributed to the failures in contract and project management:

- The former EDMS Project Manager, Mavis Georgalis, did not exert the oversight and guidance necessary for this project to be successful;
- Mavis Georgalis did not develop and implement adequate procedures, monitor vendor performance, or address deficiencies in vendor performance;
- Mavis Georgalis failed to adhere to and enforce contractual provisions, Florida Statutes, and Department procedures;
- Mavis Georgalis circumvented controls and failed to safeguard Department resources;
- Management did not establish a control structure to ensure adequate contract and project management oversight.
- Senior management's over-reliance on Mavis Georgalis; and
- Weaknesses in the control environment related to training, specific contract and project management procedures; and transparency and accountability.

Failure to adequately perform contract and project management duties exposes the Department to the following risks:

- Risk that the Department will not support core values and in so doing, will fail to meet Department business objectives;
- Risk that the Department may pay for goods and services not received, pay too much for goods and services, and pay for goods and services not requested;
- Risk that the project will not be completed in a timely manner;
- Risk that the project will not result in the efficient and effective implementation of EDMS applications; and
- Risk that the project will not be cost effective.

# Recommendation

To strengthen OIS contract and project management processes, we recommend that the Assistant Secretary for Finance and Administration require:

- The Business System Support Office Manager to develop, implement, enforce, and monitor project management procedures that includes current project management practices and emphasizes the importance of ethics and fiscal responsibility. These procedures should require Project Managers to:
  - Assess the reasonableness of invoices in relation to actual project progress;
  - o Review invoices for statutory and procedural compliance; and
  - Document that all goods and services received conform to requirements and specifications established in the contract, base line documents, and/or task assignments. This may be accomplished by adding a signed statement to the front of the

Audit Report No. 330-4002 • Page 18

- Purchase Order Delivery Notice when submitting an invoice for payment.
- The Chief Information Officer to better support OIS' project managers by assigning an OIS employee, as envisioned by the ISDM, to serve as contract manager for Type B (Contractual/Miscellaneous) and other atypical, higher-risk contracts;
  - The Chief Information Officer to incorporate standardized and comprehensive contract and project management training into OIS' current training program. This training should emphasize ethics and responsibility and include elements of the Department's Project Management Training course that apply to the management of Type B (Contractual/Miscellaneous) contracts.
  - The Chief Information Officer require Information Resource Requests and Purchase Orders to include the deliverables to be received, establish the required date of completion, hours to be expended, billing rates, and costs to be reimbursed when the primary procurement document (e.g., contract, task assignment, etc...) does not specifically these elements.

# Management Response

#### APPENDIX A -

### **Interim Advisory Findings and Recommendations**

(As previously published in the March 31, 2005 Interim Advisory Memorandum 330-4002.)

# Audit Finding 1 Development of EDMS Initiative - Contract P0162

#### **OBJECTIVE 1**

Did the project development procedures, specifications, and management direction effectively ensure the realization of an electronic document management system?

#### **CONCLUSION**

The project goals, procedures, specifications, and management direction did not effectively ensure the realization of an electronic document management system. We did not assess or draw conclusions regarding the overall success of the EDMS initiative.

#### SUPPORTING EVIDENCE

The FSC selected an implementation strategy that was inconsistent with the stated EDMS goals. An information technology application implementation methodology was used to effect change that required a broader enterprise-wide business process re-engineering methodology. Business process re-engineering involves redesigning the way work is done to better support the organization's mission and to reduce costs. Re-engineering identifies, analyzes, and redesigns an organization's core business processes, resulting in decreased costs and improved quality, service, and speed. These expected benefits closely parallel the Department's EDMS goals as stated in Policy 000-325-008-a.

The FSC strategy presumes that a significant change in business processes and Department culture would happen organically (effortlessly) – this was not a reasonable expectation. The following items are symptomatic of not providing adequate direction and oversight:

- The ESC did not plan or direct the initiative in a manner conducive to meeting the stated goals of the EDMS project.
- The FSC did not develop an implementation plan that included critical elements and milestones and specific time tables.
- The Functional Specification Document, designated as the guide and five-year implementation plan, emphasized application development and did not address the broader business process goals.
- EDMS requirements established in the RFP and ITN contained functional specifications for features desired by the Department but not readily available in the marketplace.
- The FSC and ESC dissolved in early 1998 with the appointment of the EDMS Project Manager. After early 1998, there was little involvement on the part of senior management.
- As the OIS Specialized Technologies Manager, the EDMS Project Manager was responsible for both GIS and EDMS.
- The EDMS Project Team lacked a clear team charter and project plan. Furthermore, the EDMS Policy applicable during the development phase of the initiative defined duties for

- the Project Team which were inconsistent with the achievement of the broader EDMS goals. See Appendix A for Policy 000-325-008-a, Electronic Document Management.
- The Project Team did not consist of individuals who were qualified and trained to carry out re-engineering projects and did not represent all of the functional disciplines affected by the project implementation.
- The criteria used to select the EDMS Project Manager was inconsistent with the stated goals of the EDMS project. The key qualifications for the Project Manager focused only on experience with electronic document management, rather than on experience with implementing enterprise-wide business process re-engineering initiatives. The EDMS Project Manager did not posses the experience required to successfully bring about the Department-wide business process changes.
- The EDMS vendor integrator, YEI, did not possess the software expertise or demonstrate the requisite experience to successfully implement an EDMS. More information regarding this issue is included in Finding 2.
- Management did not to publish EDMS Procedure 325-055-015.

#### **CRITERIA**

Policy 000-325-008, Electronic Document Management

Policy 001-325-008, Electronic Document Management and Geographical Information Systems.

#### **Functional Specifications Document**

Policy 000-325-008 established the Functional Specifications Document as the Department's five-year guide and EDMS implementation plan. This document recommended that the Department perform a broad based re-engineering study to analyze current business practices and to determine potential re-engineering costs and benefits. The Functional Specifications Document also recommended that the Department perform a re-staffing study to address the impact of personnel changes resulting from business process re-engineering.

#### **Best Practice Research**

The Department of Defense's Business Process Re-engineering Guide, the U.S. Government Accountability Office's Business Process Re-engineering Assessment Guide, and a variety of other literature provided common characteristics of successful business process re-engineering projects. This research indicates that the following are necessary to ensure the success of the EDMS initiative:

- Ongoing involvement of senior management;
- Clear project guidance and direction;
- Well developed, clearly communicated objectives which focus on strategic business needs:
- Experience in business process re-engineering;
- Development and use of a comprehensive implementation plan;
- A charter outlining the scope and goals of the project, the team's authority and interactions with executive management, and any other special considerations; and
- A project plan that describes the activities, deliverables, and time frames for the effort and serves as the baseline for managing activities and measuring progress.

The Department of Defense's Business Process Re-engineering Guide also provided key concepts to consider when planning and executing a business process re-engineering effort, such as:

- Minimize "as-is" business process analysis;
- Streamline business operations;
- Hone in on the real business requirements and challenge processes that merely accommodate the way it has always been done;
- Reduce the cost of doing business by eliminating:
  - o Obsolete and inefficient processes;
  - o Obsolete regulations and controls;
  - o Lengthy review and approval cycles; and
- Ensure business processes are integrated across all impacted functional areas.

#### **CAUSE**

During the development of the EDMS initiative, management did not:

- Develop an implementation methodology that was consistent with the stated goals of the EDMS:
- Provide OIS sufficient direction and oversight;
- Establish and communicate specific EDMS goals, procedures, deliverables, milestones, or roles and responsibilities that efficiently and effectively ensured the realization of an electronic document management system.

#### IMPACT/RISK

Not effectively developing the EDMS initiative has resulted in the Department inefficiently expending resources.

#### RECOMMENDATION

In response to issues affecting EDMS, management updated EDMS Policy Statement 000-325-008-a, deleting business process re-engineering references and better aligning EDMS Policy with actual project goals. In order to provide better oversight and direction, management re-assigned the responsibility for the EDMS and GIS projects to the Business System Support Office.

However, persistent obstacles have impeded the efficient and effective implementation of EDMS. In order to overcome these obstacles and to provide management with a means of measuring EDMS successes, we recommend the Secretary task the Chief Information Officer with:

- 1) Establishing specific project goals, deliverables, and milestones to allow the Information Resource Management Council to monitor the progress of the EDMS initiative.
- 2) Creating EDMS procedures that contain specific operating requirements and instructions to implement Policy Statement 001-325-008-c.

#### MANAGEMENT'S RESPONSE

We concur with the recommendation and would offer that the recommendation is currently being addressed. It is management's position that the current EDMS policy (Topic No.: 001-325-008-c) properly reflects the desired direction, at a policy level, the department intends to pursue for EDMS. We would further offer that the EDMS application projects that are currently underway

within the Office of Information Systems have properly stated goals, deliverables and milestones in accordance with the OIS Information Systems Development Methodology. As is the case with any computer application development activity, including EDMS, business process reengineering typically occurs based on users' review of their business processes and decisions made through joint application development sessions. The involvement of OIS serves as a catalyst for making BPR happen, but in reality BPR becomes a by-product of several independent activities. Computer application development and technology deployment is just part of many components that enable BPR.



# Audit Finding 2 Vendor Selection Process

#### **OBJECTIVE**

Did the vendor selection process for the EDMS vendor integrator fully comply with established procedures and efficiently and effectively ensure an appropriate vendor selection?

#### **CONCLUSION**

The vendor selection process did not fully comply with established procedures and did not effectively ensure an appropriate vendor selection.

#### SUPPORTING EVIDENCE

While our overall conclusion is that the vendor selection process did not effectively ensure an appropriate vendor selection, the process was well executed in a number of respects:

- The vendor section process conformed in all material respects to applicable time and resource constraints:
- The Technical Evaluation Team took an organized approach to evaluating the vendor proposals;
- The Live Test Demonstration process involved a wide cross-section of Department personnel representing diverse areas of expertise;
- USI compiled vendor reference information during the evaluation phase; and
- The ITN process required the completion of a pilot project prior to execution of the contract.

However, the following conditions are the basis for our conclusion that the vendor selection process did not effectively ensure an appropriate vendor selection:

- In their January 1998 proposal, YEI misrepresented their EDMS experience. The proposal included references for Siemens-Nixdorf installations of ARCIS software on which YEI had not participated. YEI entered into a partnership agreement with Siemens-Nixdorf in June 1998.
- YEI had not previously installed production ARCIS on an enterprise-wide basis and further had limited practical experience with electronic document management implementation.
- Under Ms. Georgalis' project management in District 2, YEI failed to deliver software under ICF Kaiser Contract C5767. This information was not disclosed to the other members of the Technical Evaluation Team.
- As the EDMS Project Manager, Ms. Georgalis did not disclose critical first-hand experience with YEI and did not heed USI warnings regarding deficiencies in YEI's practical electronic document management experience. The following quote indicated the nature of these warnings:

"Yang showed no knowledge of Document Management. They demonstrated very little knowledge of the Siemens product suite. The only product knowledge that was displayed was learned during the week before the live test demonstration. They demonstrated no ability to implement and maintain the system being proposed."

#### USI's Yang/Siemens Live Test Demonstration Report dated May 20, 1998

References were not adequately considered by the Technical Evaluation Team, which
resulted from the EDMS Project Manager withholding pertinent vendor performance
information. The Project Manager awarded YEI 15 out of 20 points for "references,"

- tying the highest score Ms. Georgalis awarded in this category despite the fact that she was aware of YEI's prior performance issues.
- All phases of the vendor selection process were not performed by at least three individuals as required by Section 287.057, F.S., and Department Procedure 375-040-020.
- YEI failed to satisfactorily complete the Live Test Demonstration project and was unsuccessful in demonstrating the ARCIS software.
- Live Test Demonstration results were not adequately considered. Source documentation
  was not available to verify demonstration results. Neither a comprehensive summary nor
  a formal statement of Live Test Demonstration results was in the procurement file or
  other vendor selection records.
- The two key criteria used by the EDMS Project Manager, to support the selection of YEI, were their proposed decentralized solution and compatibility with the Department's current operating system (Windows NT Version 4.0). These two criteria were inappropriately emphasized over the primary selection criteria the results of the technical proposal evaluations, Live Test Demonstrations and vendor references.
- YEI staffed the pilot project with one on-site individual hired after the Live Test Demonstration. This individual had no experience with ARCIS or the Department's requirements. Ms. Georgalis directed other Department consultants to assist YEI staff with installation of ARCIS software in an attempt to implement the CDMS pilot project.
- YEI failed to successfully implement a pilot project prior to contract execution as required by the ITN. Implementation of a Construction Document Management System (CDMS) pilot project was required by the ITN as a condition of executing the contract.
- ITN requirements were further violated in that no résumés, Price Proposal scoring, or formal statement of vendor selection results were in the procurement file or other vendor selection records.

#### **CRITERIA**

Section 287.057, Florida Statutes, Procurement of Commodities and Contractual Services This statute contains procurement requirements, including the requirement that a selection team consist of at least three employees who have experience and knowledge in the program areas and service requirements for which contractual services are sought.

#### **Department of Management Services Memorandum #21**

This memorandum provides ITN process guidelines, including basic methodologies for competitive negotiations.

# Procurement Procedure 375-040-020, Procurement of Commodities and Contractual Services

This procedure requires the Contractual Services Unit to maintain a contract file which contains all pertinent documentation of the procurement, contracting, and the administrative phases. It also requires that the vendor selection process complies with Section 287.057, F.S., and that three or more people perform the selection. This procedure also describes the procurement process as the preliminary portion of the overall acquisition process, which includes the development of the scope of services, the preliminary development of payment methods/terms and conditions, the selection of the contractor, and the establishment of pricing information.

ITN Document JA0698D1, Sections 6.0, 7.1, and 7.2 Vendor Background and Evaluation. This document:

- Requires the vendor to describe their installed base of the software product being proposed, which must include the number of installations, configuration, architecture, seats, and main customers utilizing the products;
- Establishes the evaluation and ranking criteria for each phase of the ITN process;
- Requires specific criteria and forms for developing price proposals;
- Requires vendors to provide résumés of the personnel who may be used to provide professional services; and
- States that the selected vendor will develop a pilot application that must pass a quality assurance test.

#### 1997-1998 Sterling Quality Challenge

In its response to the Sterling Quality Challenge Self Assessment Report, the Department stated that senior leaders promote the values of hard work, quality, teamwork, honesty, loyalty, and accountability. The Department further indicated that senior leaders expect employees to adhere to the Agency's values, do the job right the first time, work in an efficient manner, and provide quality customer service.

#### **Management Best Practices**

The Department has adopted five fundamental leadership competencies necessary for excellence. These competencies emphasize the ability to develop and implement strategies to maximize employee performance excellence and foster high ethical standards in meeting the Department's vision, mission, and goals. They also require management to develop and implement an organizational vision and to incorporate that vision into the State's Transportation goals and the Department's core values. The core competencies require management to demonstrate business judgment and be able to manage and apply financial, human resources, and technology management to accomplish the organization's missions. Effective and efficient decision making epitomizes sound business judgment. Results driven management stresses accountability and continuous improvement.

### **Department Core Values**

**Integrity** – We are committed to honesty, loyalty, and a high standard of ethical conduct.

**Respect** – We value diversity, talent, and ideas. We believe every individual should contribute and have the opportunity to be heard.

**Excellence** – We achieve performance excellence through hard work, innovation, creativity, and prudent risk taking.

**Team Work** – We accomplish more by working together and relying on each other.

#### **CAUSE**

The following factors contributed to the vendor selection process failure:

• The EDMS Project Manager withheld pertinent information and did not ensure compliance with all statutory and procedural requirements.

• The Department has not trained or developed all Project Managers to be effective Contract Managers. Effective contract management skills are necessary due to increased outsourcing and privatization.

#### IMPACT/RISK

An inappropriate vendor selection increases the risk that the EDMS initiative will not be successful and agency resources will be wasted.

#### RECOMMENDATION

To address the systemic issues impacting both the EDMS initiative and the Department as a whole, we recommend the Secretary task the Executive Board to establish and maintain an organizational culture that balances project completion needs with compliance, transparency, and accountability. To create this balance, the Executive Board should establish the expectations that:

- Proper stewardship of State resources is a fundamental responsibility of Department managers and staff;
- Department employees must ensure that resources are used efficiently and effectively to achieve intended results; and
- Resource use must be consistent with the Department's mission, in compliance with law and regulation, and minimize the potential for waste, fraud, and mismanagement.

To establish the above expectations, the Executive Board should:

- 1) Evaluate current Department training for coverage of matters of ethics and governance and enhance project and contract manager training.
- 2) Ensure that Department project and contract managers are adequately trained in matters of fiscal responsibility. We recommend all Department project managers be required to attend the Department of Financial Services' course "Getting What You Pay For", or a comparable course.
- 3) Establish a position responsible for contract management in major functional areas to support project managers. These individuals must possess the appropriate contract management skill sets and have an ongoing program of contract management training.
- 4) Establish and require adherence to the Project Management Handbook.
- 5) Implement, enforce, and monitor adequate procurement processes and procedures, which require a detailed justification of the selection, thorough reference checks, including the vendor's Department experience, and require vendor selection committees to sign disclosure statements for actual or perceived conflicts of interest.

#### MANAGEMENT'S RESPONSE

Management concurs with the conclusion, but we take issue with the recommendation.

We certainly recognize that this project had a number of problems during the initial procurement stages and suffered from inappropriate contract management. However, we do not feel that this particular circumstance merits the broad, sweeping changes noted in the recommendation. The advisory memorandum is focused on the specifics regarding the management of the EDMS initiative. We fully understand the problematic issues surrounding the early phases of this project and believe we have implemented measures to correct those issues for the project. To offer a recommendation as stated, we feel the OIG would need to issue an advisory report that looks at the department as a whole, not just one specific project.

#### **OIG RESPONSE**

We believe the recommendations lay out a prudent course of action supported by previous OIG audits, as well as a multi-agency state audit performed by the Governor's Chief Inspector General. The Chief Inspector General's audit report, titled "Road Map to Excellence in Contracting," documents that contracting issues relating to compliance, ethics, accountability, and stewardship are systemic, not for any one agency, but for all State agencies.

While we believe that the issues surrounding P0162 are indicative of a systemic problem impacting the Department as a whole, we are receptive to looking at the issue from a broader perspective as suggested. We will work with management to accomplish this task.

### **APPENDIX B - Audit Team and Statement of Accordance**

This audit was **conducted** by Karen Taylor, supervised by Carlos Mistry, and directed by Joseph Maleszewski.

**Statement of Accordance -** Sections 20.23 and 20.055, Florida Statutes, require the Florida Department of Transportation's Inspector General to review, evaluate and report on policies, plans, procedures, accounting, financial and other operations of the Department and to recommend improvements. This audit was conducted to assist Department management in the review of reliability and validity of selected key performance measures.

This engagement was performed in accordance with applicable Government Auditing Standards issued by the Comptroller General of the United States and Standards for the Professional Practice of Internal Auditing published by the Institute of Internal Auditors.



# **APPENDIX C – Distribution List**

